U. S. DEPARTMENT OF COMMERCE NATIONAL BUREAU OF STANDARDS WASHINGTON 25, D. C.

RBH: EMK

April 28, 1948

Letter Circular LC899 (Supersedes LC887)

EUROPEAN FOOTWEAR SIZES

by Robert B. Hobbs

Many Americans are sending shoes to friends and relatives in European countries, because of the continuing shortage of footwear there. Unfortunately the system for designating the sizes of shoes in the United States differs from that in European nations, so that there is much confusion and doubt as to what sizes of shoes to send.

Great Britain uses for women's and children's shoes a system differing from the American system only in that the figure 1-1/2 should be added to the British size designation to get the corresponding American size designation. The series of numbers used is the same, and the size increments are the same in both systems. For men's shoes, the British and American systems are nearly the same. In many cases it may be necessary to add the figure 1/2 to the British men's size designation to get the corresponding American size designation.

Continental European nations, however, use a sizing plan known variously as the "continental", "European", or "French" system. The corresponding sizes in the continental and American systems are shown in figure 1.

SHOE LENGTHS

The American system starts with children's size 0, which is for a foot 4 inches long. Each added size number corresponds to an increase of 1/3 of an inch in length. Thus, children's size 3 is for a foot 5 inches long, size 6 for 6 inches, and so on up to size 13-1/2, which is 5-1/2 inches long. Then the system goes to adult sizes. Adult size 1 is for a foot 5-2/3 inches long. Size 2 corresponds

to 9 inches, size 5 to 10 inches, and so on up to size 14, for a foot 13 inches long. Sizes above 14 continue with the same increments of 1/3 inch, but are generally stocked as standard sizes only by a few lines of men's shoes.

The British size for women's or Children's shoes corresponding to a given American size can be obtained simply by subtracting 1-1/2 from the American size shown in the figure. British and American size designations for men's shoes are nearly the same. The differences depend more on the lasts used by individual companies than on any fundamental differences in the size systems. The American shoe size will be correct, or at most only slightly long, if the figure 1/2 is added to the British men's size designation.

In the European system, the sizes are based on centimeters (2.54 centimeters equal one inch) of length, a difference of one size corresponding to a difference of 2/3 of a centimeter in length. Size 15, usually the smallest children's size, is for a foot 10 centimeters in length. This is approximately 4 inches and thus corresponds to the American size 0. European size 18 is 12 centimeters long, size 21 is 14 centimeters long, and so on. This system has only one series of numbers, and usually runs up to size 50, approximately equivalent to the American size 14.

European shoes, like American ones, are sometimes marked with a coded figure to show the size. This has led to some confusion, because Europeans have told friends or relatives in the United States the code designation of their shoe sizes, and it has been assumed that this was an American size or an American code designation. As several such codes are in existence, it is not practicable to list their equivalents in American shoe sizes. It is important, then, to learn whether your European correspondent is referring to the American size system or to the European system, or to a European code designation, before sending shoes to a recipient on the continent of Europe.

A European code designation is not enough to determine accurately the corresponding American shoe size. Such code designations are frequently misinterpreted, with the result

that shoes of the wrong size are sent.

Even the size designation written in the wearer's present European shoes may lead to an incorrect fit. This is because some Europeans have not had new shoes for many years, and both the shoes and their feet have increased in size. A man who has size 38 European shoes (American size 5) may now find this size much too small, and may require a shoe as large as American size 7. It is much safer to use the size chart as described below, or, if this is not available, the actual foot size in centimeters or inches.

One source of information indicates that, in the Netherlands, the sizes for women's shoes differ from those for men's shoes as given in the chart; apparently for women's shoes the comparison is as follows:

U. S. Size	Netherlands Size
4 1/2 5	34 35
5 1/2	35 36
5 1/2 6 1/2 7	37 38 39 40
7 1/2 . 8 8 1/2	46 41
8 1/2 9	41 42 43

It is therefore particularly desirable, when selecting shoes for women in the Netherlands, to trace the outline of the foot on the size chart, rather than to depend on any supposed correlation between shoe sizes in this country and in the United States.

SHOE WIDTHS

Even a shoe of the right length may not be wearable unless it is wide enough. Narrow shoe sizes, corresponding to our widths AAAA to B, are not common in Europe. The widths of women's shoes in most countries are designated either "narrow", corresponding approximately to the American C width, or "wide", corresponding to the American D width. Men's shoes are similarly classified as "narrow", corresponding

to the American D width, "medium" (or sometimes "wide"), about like our E width, and "wide" (or sometimes "extra wide"), which corresponds to our EE width. Unless it is known definitely that the person who will wear the shoes requires a narrower width, it will probably be safer to select at least a C width for a woman and a D width for a man, as shoes of these widths will more likely be wearable by the recipient.

MEASURING FEET WITH THE SIZE CHART

As the accompanying size chart (figure 1) is drawn to actual scale, it can be used to get a fairly close approximation to the shoe length required if no information as to present shoe size is available, and no size stick or other measuring device is at hand. For children's feet, measurements made with this chart will generally lead to a better fit than the size markings of their present shoes, since children's feet are usually growing rapidly, and the old size markings may be much too small.

The use of the chart is illustrated in figure 2. The person whose shoe size is to be determined should be seated in a chair so that the foot can be placed flat on the floor, resting on the chart. A ruler, a book, or a similar flat surface should be held vertically at the end of the chart (O mark on the inch or centimeter scale), and the heel of the foot placed against the ruler. Now someone else should hold a table knife straight up and down with the flat side against the tip of the longest toe, and make a pencil mark on the chart along the outside edge of the point of the knife.

The width of the foot can be marked in the same way. Without moving the foot on the chart, place the knife at the joint of the inside of the foot (the great toe joint) and again make a pencil mark along the outside edge of the knife point. Then place the knife at the widest part of the outside of the foot, and mark this spot with a pencil line.

Measurements should be made on each foot, and the larger size taken as a guide for selecting shoes.

If the chart is not available to the person whose shoe size is to be determined, the markings may be made on a plain sheet of paper; the position of the heel should be marked also, in the same manner as for the toe and the width.

The chart with these marks will usually enable your shoe salesman to make a close approximation where trial fitting is impossible.

HOSIERY

Tables of American hosiery sizes corresponding to American shoe sizes, representing composite summaries of varying tables used in industry are shown below. This information was taken from tables prepared by the trade journal, Hosiery and Underwear Review.

These tables hold good for all types of hosiery fibers or materials, that is, whether the hose are made of wool, nylon, or any other textile fiber.

Women's		Infants', Childre	
Shoe Size	Hosiery Size	Shoe Size	Hoslery Size
6 E to EEE 6-1/2 (all widths) 7 AAAA to C 7 D to EEE		0 to 2 2-1/2, 3 3-1/2, 4 4-1/2, 5 5-1/2 to 6-1/2 7, 7-1/2 8 to 9-1/2 10, 10-1/2 11 to 13-1/2 1, 1-1/2 2 to 3-1/2 4, 4-1/2 5 to 6 6-1/2 to 7-1/2 8	4 4-1/2 5 5-1/2 6 6-1/2 7 7-1/2 8 8-1/2 9 9-1/2

Men's	
Shoe	Hosiery
Size	Size
5 5-1/2, 6 6-1/2, 7 7-1/2, 8 8-1/2, 9 9-1/2 to 10-1/2 11, 11-1/2	9 9-1/2 10 10-1/2 11 11-1/2 12 13

In selecting hosiery for sending to Europe, it should be remembered that the average European foot seems to be wider than the average American foot, and will therefore tend to stretch the hosiery sideways and shorten it. It, therefore, appears safer, generally, to choose hosiery for a European a half size longer than indicated in the table for a given shoe length, unless other knowledge is available in a specific case. A stocking that is a little too long can be worn without much trouble, but one that is too short will only result in discomfort and excessive wear at the toe.

RUBBER OVERSHOES

The proper size of rubber overshoe to fit a given shoe depends on the contour of the toe box, the thickness and width of the sole, and the shape of the shoe generally, as well as on its marked size. Thus, a heavy brogue may well require an overshoe a half size larger than would a dress oxford of the same size.

If one is sending overshoes with the shoes for which they are intended to a European recipient, there will be no trouble in selecting the overshoes to fit the shoes in the store. If overshoes alone are being sent, the table in figure 1 will indicate the approximate size to send. Overshoes, like hosiery, had better be too long than too short. It is recommended that overshoes be selected a quarter to a full size larger than indicated by the chart. A few equivalents are given in the following table:

European Size	American Size		
20	4 (children's)		
25	8 do.		
30	12 do.		
34	2-1/2 (adults')		
38	5-1/2 do.		
42	8-1/2 do.		
46	12 do.		

If an overshoe is slightly too long, it can be made wearable by stuffing its toe with cloth or paper, but no very satisfactory remedy has been proposed for use if the overshoe is too short.

ACKNOWLEDGMENT

The assistance of the British Information Service, the American Friends' Service Committee, the Hosiery and Underwear Review, the Hood Rubber Company, and the Office of International Trade, U.S. Department of Commerce, in supplying some of the information given in this circular, is gratefully acknowledged.



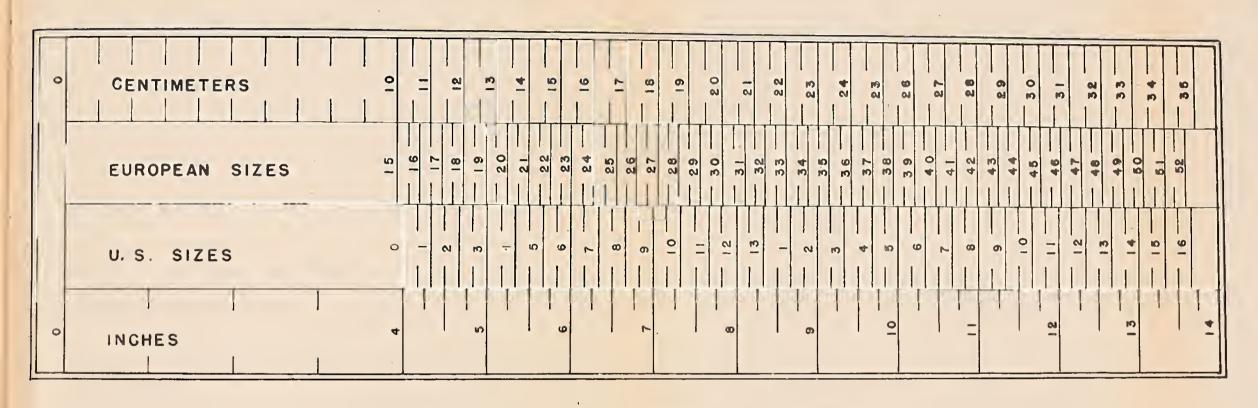


FIG. I. COMPARATIVE U.S. AND EUROPEAN SHOE SIZES





FIG. 2

MEASURING FEET WITH SIZE CHART

